

33. EXISTING WATER AND SEWER BY CFPUA.

34. SOLID WASTE DISPOSAL WILL BE BY ROLL OUT CARTS FOR EACH UNIT.

GRAPHIC SCALE: 1"=20

REVISIONS

20. DAMAGED FACILITIES SHALL BE REPLACED BY AN APPROVED CONTRACTOR, ACCORDING TO

STANDARD NCDOT REPLACEMENT SCHEDULES AND CURRENT NCDOT DESIGN STANDARDS.

22. ANY BACKFLOW PREVENTION DEVICES REQUIRED BY THE CFPUA WILL NEED TO BE ON THE

OF THE AREA BEING OPEN CUT MAY BE REQUIRED.

LIST OF APPROVED DEVICES BY USCFCCCHR OR ASSE.

21. A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. NOTE THIS ON THE.

PLAN AND CONTACT 341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING

ANY IRRIGATION SYSTEM SUPPLY BY CFPUA WATER SHALL COMPLY WITH THE CFPUA

CONSULTANT (910) 392-8712. PLEASE CONTACT HIM PRIOR TO STARTING THE PROJECT

THE BELLSOUTH CONTACT IS STEVE DAYVAULT. HE IS THE BUILDING INDUSTRY

IN ORDER TO FACILITATE GOOD COMMUNICATION AND MAXIMUM FLEXIBILITY.

CONTACT THE NORTH CAROLINA ONE CALL CENTER AT 1-800-632-4949 PRIOR TO DOING ANY

CROSS CONNECTION CONTROL REGULATIONS.

DIGGING, CLEARING OR GRADING.

11/13/19 1"=20' NNC WSL Project No:

RIGHT ANGLE ____ENGINEERING, P.C. 212 PRINCESS STREET

WILMINGTON, NC 28401 FIRM# C-0829

NORTH CAROLINA

0 SPACES

8 SPACES

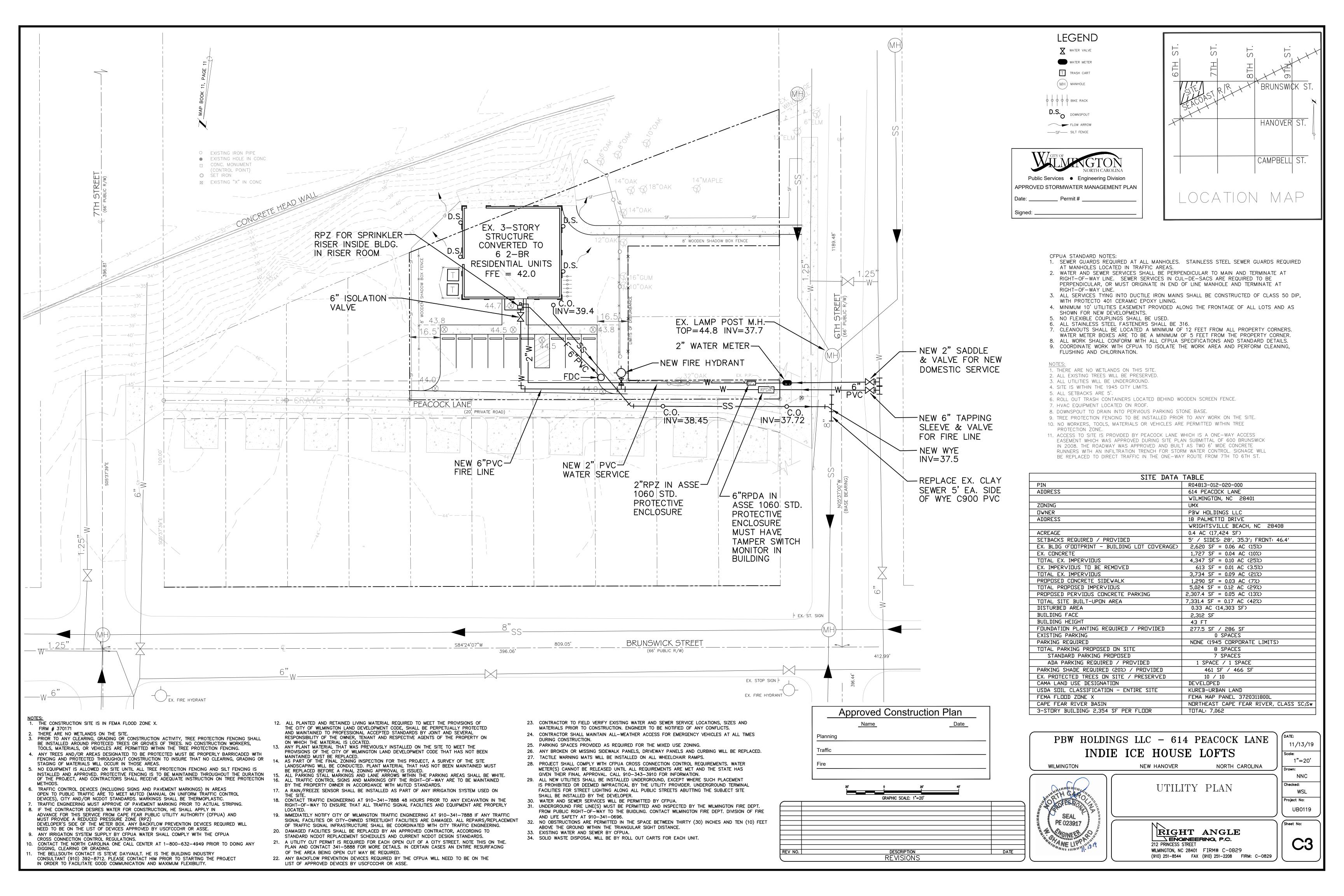
7 SPACES

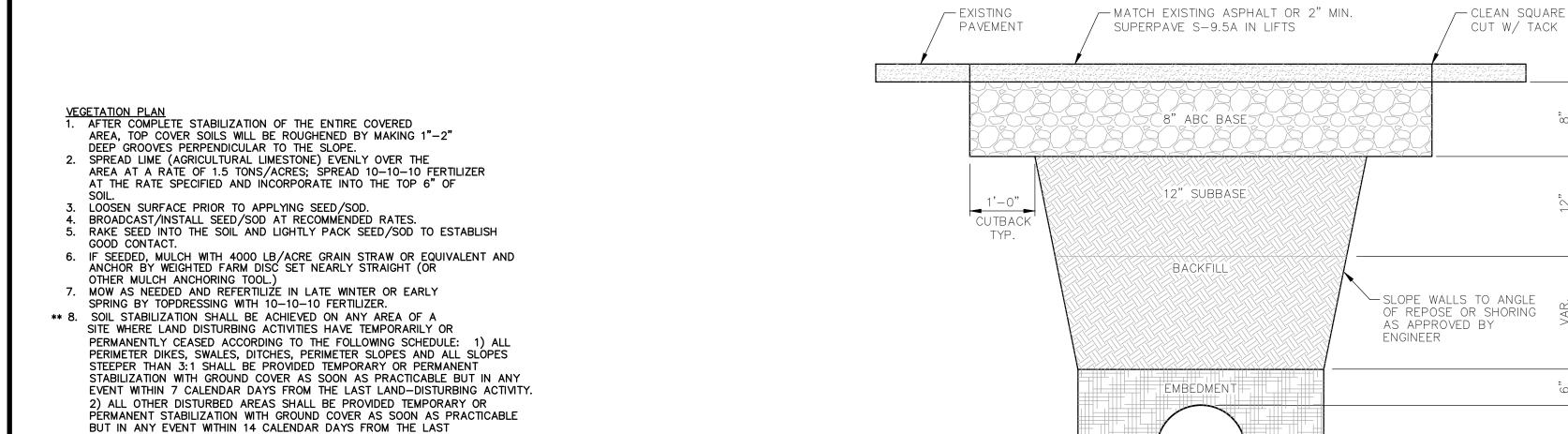
Sheet No: (910) 251-8544 FAX (910) 251-2208 FIRM: C-0829

HANOVER ST.

CAMPBELL ST

__Date__





PAVEMENT REPAIRS DETAIL (SD 1-05)

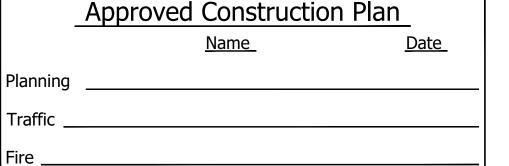
#57 STONE PIPE BEDDING

PAVEMENT REPAIR NOTES

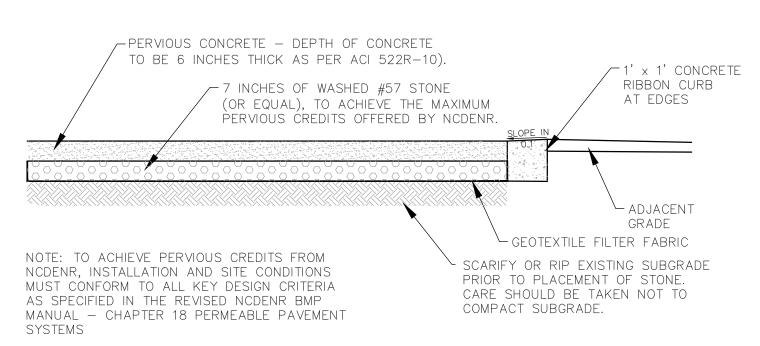
- 1. BACKFILL SHALL BE SUITABLE MATERIAL THAT IS FREE FROM HEAVY CLAY, GUMBOS, DEBRIS,
- ORGANICS AND LITTLE TO NO EXCESSIVE MOISTURE. 2. SELECT BACKFILL MAY BE SUBSTITUTED OR REQUIRED BY CITY TO ACHIEVE COMPACTION,
- (I.E. #57, ABC, CRUSHED LIMESTONE, CLEAN SAND, FLOWABLE FILL, ETC.) 3. 8 INCH OF ABC BASE MATERIAL SHALL BE USED ON CITY STREETS.
- 4. BACKFILL AND BASE MATERIALS SHALL BE COMPACTED 12" MINIMUM LIFTS 5. SOIL SHALL BE COMPACTED BY A MECHANIZED TAMPER (I.E. JUMPING JACK), HOWEVER
- VIBRATORY ROLLERS > 18" WIDTH MAY BE USED FOR LARGER EXCAVATIONS. THE PLATE TAMP METHOD SHALL NOT BE USED.
- 6. ALL APPROVED CASTINGS SHALL BE SET FLUSH TO GRADE AND SUPPORTED IF APPLICABLE. 7. ABC BASE AND SUBBASE COMPACTED TO 98% AND BACKFILL AND EMBEDMENT COMPACTED
- TO 90% AS DETERMINED BY THE MODIFIED PROCTOR AASHTO METHOD T-99.
- 8. 1 FOOT CUTBACKS OF ASPHALT SHALL BE PREPARED ON UNDISTURBED SOIL. MINIMUM
- ASPHALT DENSITY IS 90%.

EXPANSION-JOINT — CONTROL — FILLED JOINT EXPANSION 5'-0" JOINT EXPANSION-JOINT ─ 4" ABC STONE — COMPACTED AS REQUIRED

SIDEWALK DETAIL (SD 3-10)



SIDEWALK NOTES 1. JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS. SANITARY SEWER CLEAN-OUTS, WATER METERS, MANHOLES AND VALVE LIDS TO BE LOCATED OUTSIDE SIDEWALK WHERE FEASIBLE. MINIMUM SIDEWALK WIDTH TO BE 6' IF PLACED AT BACK OF CURB. CONCRETE FOR ALL SIDEWALKS (EXCEPT ANY PORTION CONTAINED WITHIN A DRIVEWAY APRON) SHALL BE CLASS "A" - 3.000 PSI MINIMUM REPLACEMENT FOR REPAIRS IS A 5' x 5' PANEL. MINIMUM DEPTH FOR TUNNELING BELOW SIDEWALK IS 12". MAX ADJACENT GROUND SLOPE WITHOUT RAILING IS 2:1 MIN. GRADE FOR PROPER DRAINAGE IS 1% IN AT LEAST 1 DIRECTION. MAX. CROSS SLOPE IS 2%. MAX. LONGITUDINAL SLOPE IS 8.3%, 10% IF LIMITED BY EXISTING CONDITIONS, OR NO GREATER THAN THE SLOPE OF THE EXISTING ADJACENT ROAD.



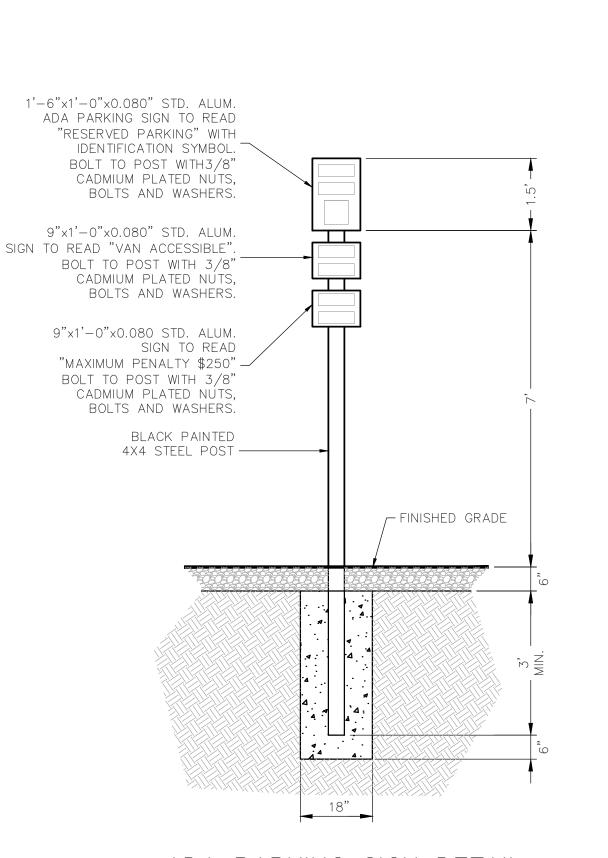
8" WHITE

MARKINGS

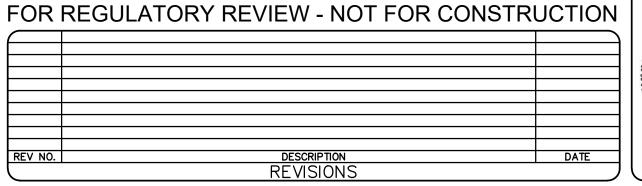
THERMOPLASTIC —

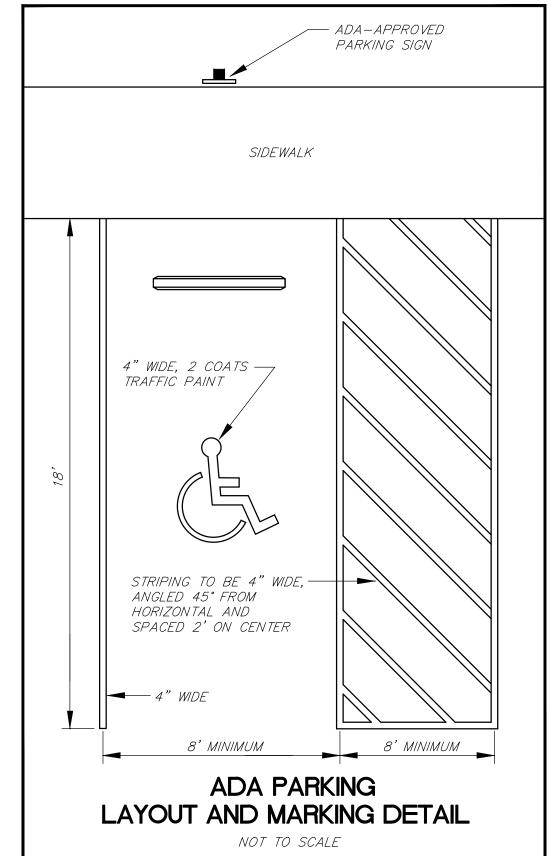
NO PARKING MARKING

PERVIOUS CONCRETE SECTION



ADA PARKING SIGN DETAIL





8" WHITE-

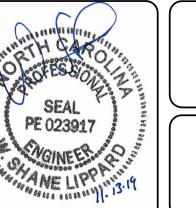
PAINTED

MARKINGS

CROSSWALK MARKING

614 PEACOCK LANE INDIE ICE HOUSE LOFTS

WILMINGTON NEW HANOVER NORTH CAROLINA



DETAILS

NNC WSL Project No:

RIGHT ANGLE ZENGINEERING, P.C. 212 PRINCESS STREET WILMINGTON, NC 28401 (910) 251-8544 FAX (910) 251-2208 FIRM: C-0829

Public Services • Engineering Division APPROVED STORMWATER MANAGEMENT PLAN _ Permit #_

LAND-DISTURBING ACTIVITY.

AFTER EVERY RAIN EVENT.

OR TURBID DISCHARGES DAILY.

THROUGHOUT CONSTRUCTION.

SITE SURVEY BY MCKIM&CREED.

CONTROL DEVICES (MUTCD).

SEDIMENT FROM THE SITE.

PRIOR TO BEGINNING CONSTRUCTION.

BEGIN CLEARING AND GRADING OF STABILIZE INFILTRATION AREAS.

A PARKED VEHICLE.

CONSTRUCTION SCHEDULE

OR IS DAMAGED.

GENERAL NOTES

PARKING NOTES

1. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED

RAINFALL, BUT IN NO CASE, LESS THAN ONCE EVERY WEEK AND

2. ALL POINTS OF EGRESS WILL HAVE CONSTRUCTION ENTRANCES THAT

3. SEDIMENT WILL BE REMOVED FROM HARDWARE CLOTH AND GRAVEL INLET PROTECTION, BLOCK AND GRAVEL INLET PROTECTION, ROCK

THE DESIGNED STORAGE CAPACITY HAS BEEN HALF FILLED WITH

WITHIN 24 HOURS OF EVERY HALF-INCH RAINFALL.

FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING

WILL BE PERIODICALLY TOP-DRESSED WITH AN ADDITIONAL 2 INCHES

OF #4 STONE TO MAINTAIN PROPER DEPTH. THEY WILL BE MAINTAINED IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE SITE. IMMEDIATELY REMOVE OBJECTIONABLE MATERIAL SPILLED,

WASHED OR TRACKED ONTO THE CONSTRUCTION ENTRANCE OR ROADWAYS.

DOUGHNUT INLET PROTECTION AND ROCK PIPE INLET PROTECTION WHEN

SEDIMENT. ROCK WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT

POOL NO LONGER DRAINS AS DESIGNED. DEBRIS WILL BE REMOVED FROM

AROUND BEAVER DAMS, DANDY SACKS AND SOCKS ONCE A WEEK AND

IT BECOMES HALF FILLED. THE SEDIMENT FENCE WILL BE REPAIRED AS

NECESSARY TO MAINTAIN A BARRIER. STAKES MUST BE STEEL. STAKE

SPACING WILL BE 8 FEET MAX. WHEN STANDARD STRENGTH FABRIC AND

IN THE SEDIMENT FENCE, THE ROCK WILL BE REPAIRED OR REPLACED IF

IT BECOMES HALF FULL OF SEDIMENT, NO LONGER DRAINS AS DESIGNED

5. SEDIMENT WILL BE REMOVED FROM THE SEDIMENT BASIN WHEN THE DESIGN STORAGE CAPACITY HAS BEEN HALF FILLED WITH SEDIMENT. ROCK WILL BE

7. FLOCCOLENTS WILL BE USED TO ADDRESS TURBIDITY ISSUES. THE PUMPS, TANKS, HOSES AND INJECTION SYSTEMS WILL BE CHECKED FOR PROBLEMS

MAINTAIN A VIGOROUS, DENSE, VEGETATIVE COVER.

1. CONTRACTOR SHALL CONTACT THE N.C. ONE CALL CENTER

2. CONTRACTOR SOLELY RESPONSIBLE FOR COORDINATION WITH EXISTING UTILITIES AND ANY DAMAGE THAT OCCURS.

4. NO WETLANDS EXIST WITHIN THE PROJECT SITE.

3. ALL TREES TO BE SAVED MUST BE PROPERLY PROTECTED

5. TOPOGRAPHIC AND LOCATION INFORMATION SHOWN BASED ON

1. WHEEL STOPS SHALL BE REQUIRED 2.5 FEET FROM THE END

ALL PARKING STALL MARKINGS AND LANE ARROWS SHALL

ALL OTHER PAVEMENT MARKINGS, SIGNS OR OTHER TRAFFIC

OF PARKING STALL WHEN USING EIGHTEEN FEET DEEP STALLS.

CONTROL DEVICES SHALL CONFORM TO THE LATEST EDITION AND/OR INTERPRETATION OF THE MANUAL ON UNIFORM TRAFFIC

NO OBSTRUCTIONS WILL BE ALLOWED ADJACENT TO A PARKING STALL WHICH WOULD PREVENT SAFE INGRESS AND EGRESS FROM

OBTAIN PLAN APPROVAL AND OTHER APPLICABLE PERMITS. HOLD PRE-CONSTRUCTION MEETING AT LEAST ONE WEEK

INSTALL STORM PIPING, CATCH BASINS AND CURB INLETS. INSTALL INLET PROTECTION FOR CATCH BASINS AND CURB

NECESSARY REPAIRS SHOULD BE MADE IMMEDIATELY. 9. AFTER THE ENTIRE COVERED AREA IS STABILIZED, ALL

VEGETATIVE REPAIRS SHOULD BE COMPLETED.

10. FLUSH ALL PIPING OF ACCUMULATED SEDIMENT

INLETS TO RESTRICT MOVEMENT OF SEDIMENT FROM THE SITE. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED BI-WEEKLY AND AFTER EACH RAINFALL EVENT. ANY

TEMPORARY MEASURES WILL BE REMOVED AND PERMANENT

ELEVATION. ESTABLISH PERMANENT VEGETATION IN BASIN.

CLEAN OUT INFILTRATION BASIN AND EXCAVATE TO FINAL DESIGN

INSTALL/MAINTAIN TEMPORARY CONSTRUCTION ENTRANCE/EXIT. BEFORE CLEARING AND GRADING OF SITE, INSTALL SILT FENCING AT THE BASE OF SLOPES TO RESTRICT MOVEMENT OF

TO LOCATE EXISTING UTILITIES AT THE SITE PRIOR TO ANY

WIRE BACKING ARE USED. IF ROCK FILTERS ARE DESIGNED AT LOW POINTS

CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS OR IF THE ROCK IS DISLODGED. BAFFLES WILL BE REPAIRED OR REPLACED IF THEY COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE. THEY WILL BE REPLACED PROMPTLY. SEDIMENT WILL BE REMOVED FROM BAFFLES WHEN DEPOSITS REACH HALF THE HEIGHT OF THE FIRST BAFFLE. FLOATING SKIMMERS WILL BE INSPECTED WEEKLY AND WILL BE KEPT CLEAN. 6. ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO

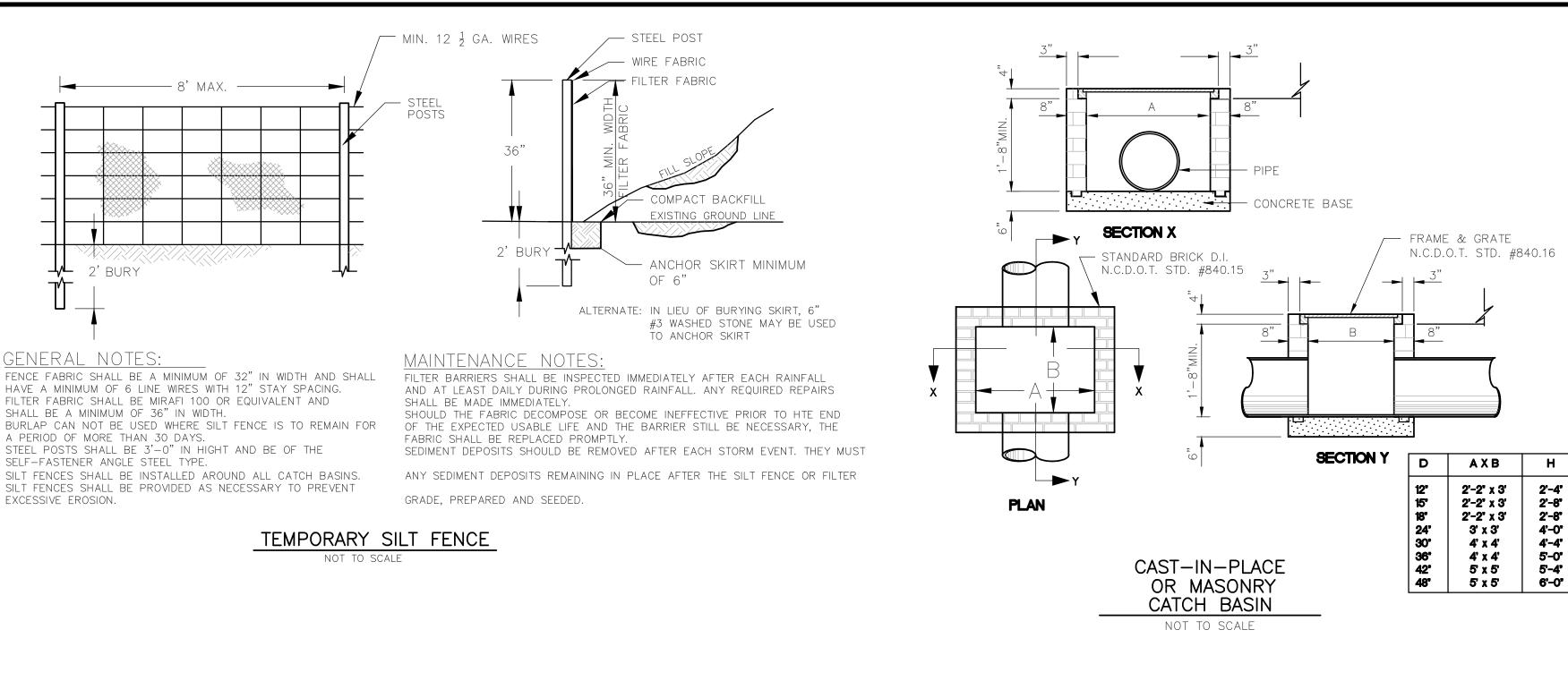
. SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN

MAINTENANCE PLAN

Approved Construction Plan

11-13-19 SHOWN

> UB0119 Sheet No:





General Notes: Precast Catch Basins

of the most recent "Standards Specifications for Roads and

2. Concrete compressive strength shall be 4000 PSI Minimum and

shall meet the requirements as specified in NCDOT section

3. Reinforcing steel shall be of deformed steel bars conforming to

the requirements of ASTM-A-615, grade 60, or welded wire

fabric conforming to the requirement of ASTM-A-82 or both.

4. Reinforcing steel design shall be according to C-890-78 for

5. Steps required on structures over 42" deep shall be on steel

. Pipe connections shall be sealed with approved mortar. NCDOT

8. Lift holes shall be located as required for handling and sealed

approved brick may be used in conjunction with mortar at the

6. Section joints shall be sealed with butyl rubber sealant or

NCDOT approved mortar at the option of the contractor.

after installation with NCDOT approved mortar.

reinforced copolymer polypropylene plastic.

Structures" And ASTM-C-913 for "Reinforced Concrete Water

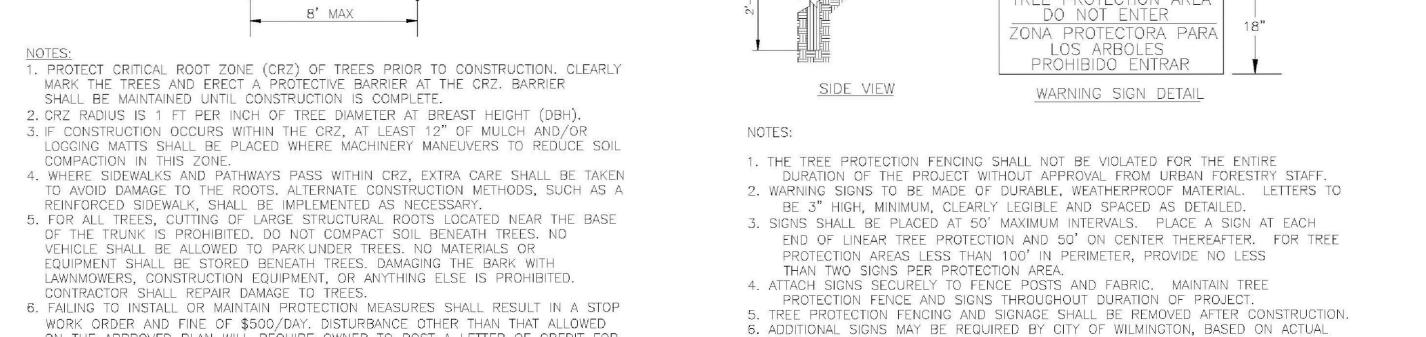
1. Precast concrete structures shall be in accordance

and Wastewater Structures".

H-20-44 Loading.

contractors option.

with NCDOT section 1077 for "precast concrete units"



TREE PROTECTION DURING CONSTRUCTION: SD 15-09

FIELD CONDITIONS.

NOT TO SCALE

TEMPORARY SEEDING

3 YRS FOR TREE MITIGATION.

THE CRITICAL ROOT ZONE (CRZ) OF A TREE

IS WHERE THE MAJORITY OF A TREE'S ROOTS

LAY. 85% OF MOST TREE ROOTS ARE FOUND

IN THE TOP 24" OF THE SOIL AND SUPPLY

GENERALLY, ROOTS SPREAD OUT 2-3X THE

THE MAJORITY OF NUTRIENTS AND WATER.

HEIGHT OF THE TREE.

GRASS TYPE	AMOUNT/1000 SF	TIME OF SEEDING	INITIAL	FERTILIZATION/1000 SF MAINTENANCE		
RYE GRAIN	1-2 LBS	NOV. THRU JAN.	25 LBS 10-10-10	N/A	N/A	N/A
BROWN TOP MILLET	1-2 LBS	JUNE THRU AUG.	25 LBS 10-10-10	N/A	N/A	N/A

ON THE APPROVED PLAN WILL REQUIRE OWNER TO POST A LETTER OF CREDIT FOR

CROWN OF THE TREE IS NEEDED FOR LEAF

THE AIR, REDUCE WIND AND SOFTEN NOISE.

OR ORANGE SILT FENCE

(TYPICAL)

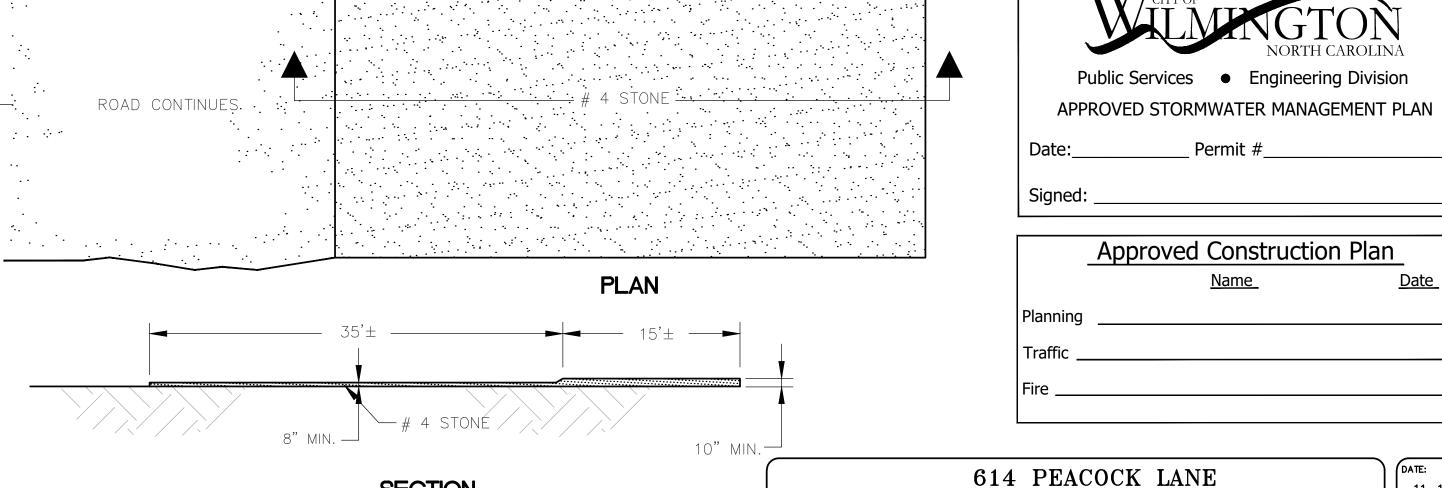
GROWTH TO PRODUCE OXYGEN, FILTER

DO NOT DISFIGURE CROWN WITH

INTENSIVE PRUNING.

PERMANENT SEEDING

GRASS TYPE	AMOUNT/1000 SF	TIME OF SEEDING	INITIAL	FERTILIZATION/1000 SF MAINTENANCE		
BERMUDA, COMMON	1-2 LBS	APR. THRU JUNE	25 LBS 10-10-10	MARCH-APRIL 12 LBS 10-10-10	EACH 4-8 WKS 1-2 LBS N.	AUG- SEPT 12 LBS 10-10-10
FESCUE, TALL (KENTUCKY 31)	5-7 LBS	SEPT THRU OCT FEB THRU OCT	25 LBS 10-10-10	FEB - MARCH 12 LBS 10-10-10	MAY & DEC 1/2 TO 1 LB. N.	SEPT - OCT 12 LBS 10-10-10
SERICEA LESPEDEZA (SLOPES)	1-2 LBS	MARCH THRU APR.	25 LBS 10-10-10	FEB - MARCH	1/2 TO 1 LB. N	. N/A



ASPHALT SECTION WHERE

CONÇ.

ALLEY HEADER CURB

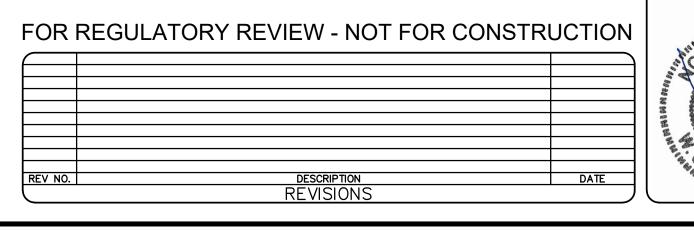
NOT TO SCALE

NEEDED TO MATCH EX.

(TYPICAL)

SECTION

TEMPORARY CONSTRUCTION ENTRANCE SCALE: 1"=10'



11-13-19 INDIE ICE HOUSE LOFTS SHOWN WILMINGTON NEW HANOVER NORTH CAROLINA

17-1/2"

R=1-1/4"

AGGREGATE BASE COURSE

CONCRETE CURB AND GUTTER (SD 3-11)

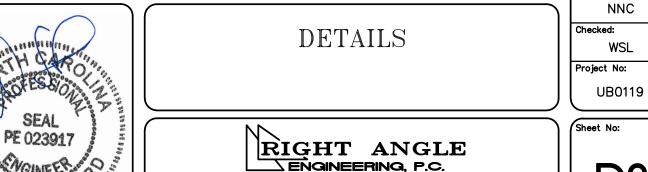
NOT TO SCALE

ONCRETE ANCHOR

8"AGGREGATE BASE COURSE

AGGREGATE BASE COURSE

GRAVEL DROP INLET PROTECTION (GRAVEL DONUT)



____ENGINEERING, P.C. 212 PRINCESS STREET WILMINGTON, NC 28401 (910) 251-8544 FAX (910) 251-2208 FIRM: C-0829

